

# Identification of funding mechanisms for private sector participation in the provision of rural household sanitation facilities, in Nkhata Bay District (Malawi)

The paper identifies funding mechanisms for private sector participation and provision of rural household sanitation facilities, within Nkhata Bay District, Malawi.

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### Abstract

Despite awareness of the benefits of sanitation and a willingness to pay, many households in rural Malawi districts do not have improved sanitation. There is a need to support rural households to move from unimproved to improved, through a coordinated approach by the private-sector, district, NGOs, donors and financial institutions. It can be recommended to support private sector sanitation participation rural Malawi districts must focus on: 1) Commercial business loans to the private sector, 2) Low cost improved sanitation solutions less than 12'132 MWK (Malawi-Kwacha, ca. 22.50 EUR), 3) Further marketing and community education about the need for improved sanitation facilities, 4) Build-up of commercial banks to offer loans for sanitation business if special conditions set by the banks are met/negotiated, 5) The Nkhata Bay District Coordinating Team should include commercial financial institutions, and 6) Sanitation user association savings fund, modelled after water user associations, for provision of sanitation services at the community level.

### Introduction

An estimated 2.5 billion of the world's population lacks access to basic sanitation, many of which live in rural areas (WHO/ UNICEF, 2013). At the current rate of water and sanitation development, the world is likely to miss the Millennium Development Goal (MDG) target (to halve, by 2015, the proportion of people without access to basic sanitation) (United Nations, 2008). Private sector participation in rural sanitation marketing provides one of the greatest opportunities to improve sanitation access. In Malawi, emptying of pit toilets and toilet construction are the two primary options for private sector participation in sanitation and hygiene promotion. Franceys and Weitz (2003) note the historical tendency to assume for public health topics in water and sanitation businesses would be uninterested in selling to those who are less able to pay, and for water and sanitation to be supplied by public sector involvement rather than private sector. But, Franceys and Weitz (2003) found public entities are not always serving the poor and that the private sector has an opportunity within this gap. But, there are business and operating model challenges for the private sector in sanitation service promotion, especially for fecal sludge management (Chowdhry and Kone, 2012). Funding to enable participation is vital to a successful strategy, both in terms of providing start-up finances to interested businesses and entrepreneurs and needed funds for private sector construction of household sanitation facilities.

### **Key messages:**

- Commercial business loans to the private sector, rather than household (customer) loans.
- Low cost improved sanitation solutions. These should cost less than 12'132 MWK (Malawi-Kwacha, ca. 22.50 EUR), or should result from agreements with the private sector provider whereby the customer can reduce the cost by providing the materials (bricks or cement).
- Further marketing and community education is needed about the need for improved sanitation facilities.
- Build-up of commercial banks to offer loans for sanitation business if special conditions set by the banks are met/ negotiated.
- The Nkhata Bay District Coordinating Team (DCT) should include commercial financial institutions.

This report identifies existing funding mechanisms and makes recommendations for how these might be improved to enhance private sector involvement in the sanitation and hygiene sector. These insights emerge from a wider research project entitled "Private sector participation in the delivery of sanitation and hygiene services." This paper provides an overview of the wider research project and of its focus location, Nkhata Bay District, followed by details on research methodology and key findings, and concluding with recommendations for ways to improve the funding landscape to encourage private sector participation in sanitation and hygiene service delivery.

## "Private sector participation in the delivery of sanitation and hygiene Services" project

The "Private Sector Participation in the delivery of Sanitation and Hygiene Services" project is being implemented by the Centre of Excellence in Water and Sanitation, located at Mzuzu University in northern Malawi. The Centre aims to improve the effectiveness of sanitation, hygiene practices, and water supply interventions serving Malawi and the surrounding countries. It participates in applied research, water quality analysis, training, consultancies, outreach programs, teaching and the practical application of research findings.

The project in question is funded by the UK Department for International Development through the SHARE Research Consortium. The project will specifically address the following components:

- Identification of private sector institutions and their roles
- Identification of the potential opportunities, barriers and threats within the sector in taking up sanitation as a business
- Identification of funding mechanisms for private sector participation and provision of household sanitation facilities, which among others would include creation of a Sanitation Fund
- Identification of initiatives District Councils are taking to encourage the medium to high-scale entrepreneurs to take up sanitation as a business as stipulated in the National Sanitation Policy
- Identification of the reasons why lending institutions are not willing to provide financial services.

### Nkhata Bay District, Malawi

The mission of the National Sanitation Policy is "to ensure that all people in Malawi own and have access to improved sanitation facilities, practice safe hygiene, and practice safe recycling of liquid and solid waste for sustainable environmental management and socio economic development" (Malawi Government, 2008). Of note, only the National Water Policy (Malawi Government, 2005) contains language supporting public-private partnerships for both water and sanitation. The National Sanitation Policy does not outline this sanitation sector opportunity. The study was conducted in Nkhata Bay District, a mostly rural area in the northern region of Malawi, which according to the 2008 census had a total population of 215,789 (Malawi Government, 2009a). The District was chosen due to its unemployment rate for women at 28.5% and men at 10.2%. Additionally, the most common method of waste (human excreta) disposal in the District is a non-improved sanitation facility (95% of households) such as a traditional pit toilet. The District borders Lake Malawi, resulting in fishing and fish farming as the primary source of income and food for over 90% of the District population (Malawi Government, 2009a). This poses a unique environmental and social barrier to improving sanitation and increasing demand for household or community sanitation facilities provided by the private sector. Located along the along the lakeshore, that much of the District population spends up to 12 hours a day on the lake and there are many areas of thick forests both promote open defecation out of convenience. Also, toilets easily collapse since land is rocky and sandy in most parts of Nkhata Bay.

### Method

The project used a number of data collection methods, including key informant questionnaires and in-depth interviews, focus group discussions, and non-participant observation. Data collection tools received ethical clearance from the National Commission for Science and Technology. Key informants from the government, public and private sector were selected purposively (purposive sampling) based on their involvement and participation in the delivery of sanitation and hygiene services at national and district level.

Households, District non-governmental organizations, donors, financiers and other private institutions in the delivery of sanitation and hygiene services in Malawi were specifically targeted for data on what they are doing in terms of leveraging local small-scale financing and creation of sanitation funds.

A water and sanitation household survey was conducted in Nkhata Bay District in Traditional Authorities (TA) Mkumbira and Mlanda. The survey was undertaken in 4 Group Village Headmen (Chilerawana, Kamwadi, Kandezu and Mkumbira) under Traditional Authority Mkumbira and 3 Group Village Headmen (Chanyentha, Msundu and Ng'ombo) under TA Mlanda. A total of 311 households were interviewed during this survey.

Data on funding mechanisms for private sector participation and provision of household sanitation facilities, which among others would include creation of a sanitation fund is limited. As such, this report will provide case studies for support of the research findings. private sector provision of rural household sanitation





Figure 1. Number of respondents reporting ownership of any of seven household accessories (bike, cell phone, radio, television, cook stove, refrigerator and/ or car) categorized by toilet type. Respondents were grouped into two contingency categories (0-2 and 3-7 accessories) to represent lower and higher levels of household income, respectively. Respondents were further grouped into improved toilet (flush/pour flush, ventilated improved pit toilet, or pit toilet with slab) or unimproved toilet (pit toilet without slab/open pit or no facilities/bush/field) to represent sanitation facility status, respectively.

### **Key messages**

# What households are willing to spend on sanitation services?

Households in the District surveyed showed awareness for the importance of sanitation facilities and interest in uptake of the improved toilets being offered by the private sector at the moment.

The majority of households surveyed (64%) used a pit toilet without a slab, which is not an improved sanitation facility. No surveyed households reported using a composting toilet, bucket, or hanging toilet/toilet. The survey showed the rate of access to improved toilets was 30% for lower income and 45% for higher income groups, respectively. A greater percentage of households with higher income households have access to improved toilet facilities in this rural District (Figure 1). The data shows even higher income households have shared toilets in this rural District, but that higher income households have non-shared facilities (73%) more often than lower income households (62%) (Figure 2).

Households were asked to state how much they would be willing to pay in order to have an improved toilet. The overall average amount was 8'580 MWK (ca. 16 EUR) with a minimum of 50 MWK (ca. 0.09 EUR) and a maximum of 95'000 MWK (ca. 1755 EUR) (standard deviation of 12'132 MWK, ca. 22.5 EUR). Furthermore, 65% of the respondents indicated they preferred to have a pit toilet with a slab while 29% preferred a flush/pour flush. Further analysis was done, and both lower and higher levels of household Figure 2. Number of respondents reporting ownership of any of seven household accessories (bike, cell phone, radio, television, cook stove, refrigerator and/ or car) categorized by whether their toilet is shared. Respondents were grouped into two contingency categories (0-2 and 3-7 accessories) to represent lower and higher levels of household income, respectively. Respondents were further grouped into shared and non-shared toilets, respectively.

income are willing to pay (Figure 3). As expected, a greater percentage of households with higher income are willing to pay more for an improved toilet facility. While the maximum reported willingness to pay is greater in the higher income level group, interestingly, the average willness to pay for lower income households was 8'063 MWK (ca. 15 EUR) and for higher income households was 9'452 MWK (Malawi-Kwacha, ca. 17.50 EUR), a difference of only 1'389 MWK (Malawi-Kwacha, ca. 2.60 EUR). This shows among both low and higher income levels, there is a reluctance to invest much cash in improved household sanitation facilities.

For comparison, corbelled toilets were being sold for as little as 3'000 MWK (ca. 5.50 EUR) if the customer supplied materials (bricks) and up to 30'000 MWK (ca. 55 EUR) inclusive of all materials and labour, while the current price of a 50-kg bag of maize is 8'000 MWK (ca. 15 EUR), the staple food of Malawi. This shows while households may be willing to spend a small amount on improved sanitation services, that it is still not a large priority.

# Existing financial models for different sector providers

The financial models for providers at both District and National level for the sanitation sector include:

- Donor-Malawi Government-NGOs-Communities
- Donor-NGOs-Communities
- Donor-Communities
- Donor-NGOs-Private Sector



Figure 3. Number of respondents reporting ownership of any of seven household accessories (bike, cell phone, radio, television, cook stove, refrigerator and/or car) categorized by willingness to pay for an improved toilet. Respondents were grouped into two contingency categories (0-2 and 3-7 accessories) to represent lower and higher levels of household income, respectively. Respondent's minimum, average and maximum values in each category are presented.

- Government-NGOs- Community
- Government-Community
- Private Sector
- Private Sector Private Sector

The Donor-NGOs-Communities model is currently the most common in Nkhata Bay District. Secondarily is the Donor-Government-Community model under sector wide approach (SWAp), which involves all donors putting their money into one basket, and all activities within the sector financed from one source. Either of the models utilizing the private sector were observed to be very limited.

### Current activities geared towards leveraging financing for private sector provision of sanitation and hygiene services

Research indicated there are very limited activities by the government, development partners, NGOs, financiers and other private institutions currently happening to leverage local small-scale financing for providers of sanitation and hygiene services in the District.

At present, the Government's activity in terms of providing financial support for private sector participation in the WASH sector is limited in both policy and, especially in rural areas, implementation.

The National Sanitation Policy (Malawi Government, 2008) has proposed the establishment of the SWAp for the water and sanitation sector, which would include a Common Fund for the sector that brings together finances for the sector, from government, private loans and development partners.

The fund would finance sector activity as per a joint, sector wide, strategy for improving sector performance and driving progress in water, sanitation and hygiene. This would greatly increase strategic and budgetary coordination, and may provide an opportunity for a more coordinated approach to financial support for private sector participation as well as household subsidies where needed. However, not all donor partners want to be part of the SWAp where they would 'loose' control of their target projects.

At the district level, the Nkhata Bay District Coordinating Team (DCT) coordinates issues, scope and budget of water and sanitation in the District in line with the Nkhata Bay District Development Plan (Malawi Government, 2009b). Notably, this team does not include participation by commercial financial institutions at this time.

The only evidence available of a sanitation fund at the district level is the Community Organisation and Development (CCODE) sanitation fund for leveraging local small-scale financing and creation of a sanitation fund for providers of sanitation and hygiene services to communities. The Malawi Homeless People's Federation (MHPF) Nkhata Bay Chapter has so far constructed 50 Skyloo toilets at households using this fund. The MHPF initially conducts a sensitization campaign within the community and thereafter households approach the MHPF for construction of improved toilets. Currently a household contributes 3'500 MWK (ca. 6.55 EUR) while MHPF matches this with a material loan of 35'00 MWK (ca. 65 EUR), payable within two years with an interest rate of 2% per month. The interest rate charge is much less than commercial bank loans, currently at 35-40% interest. The MHPF does not get paid for its services.

### **Recommendations/Conclusions**

This report identifies funding mechanisms for private sector participation in the provision of household sanitation facilities. The report finds there is an awareness of the importance of sanitation facilities as well as willingness by households to pay for sanitation services in Nkhata Bay District. These are key to the successful scale-up of private sector participation in sanitation services within this rural District.

There is a clear opportunity for private sector participation in the provision of household sanitation facilities. Sugden (2013) promotes the need to move from sanitation as a service, to sanitation as a product. Despite awareness of the benefits of sanitation and a willingness to pay, many households in the District do not have improved sanitation at the household level. There is a need to support rural households to move from unimproved to improved, through a coordinated approach by the District, NGOs, donors and financial institutions. The most inaccessible rural areas must be reached to encourage households to champion sanitation, adopt good sanitation and hygiene practices, move to improved forms of household sanitation, and maintain them. Sanitation marketing and community health interventions are needed first, to promote good sanitation and hygiene in the area, followed by further build-up of the private sector and improved sanitation facilities. The study findings suggest there are further challenges beyond availability of water hindering the adoption and promotion of good sanitation and hygiene practices by households in the area. These include the collapse of toilets and the inability of users to replace them due to issues of affordability, leading to open defecation. This indicates a strategy to move up household spending on sanitation services in the District is needed.

#### References

- Chowdhry, S., Kone, D. (2012): Business Analysis of Fecal Sludge Management: Emptying and Transportation Services in Africa and Asia. Draft final report, The Bill & Melinda Gates Foundation, USA (http://saniblog.org/wp-content/uploads/2012/12/10-country-FSM-Final-Report\_September-2012-1-2-copy.pdf, assessed 5 July 2014).
- Franceys, R., Weitz, A. (2003): Public-private community partnerships in infrastructure for the poor. Journal of International Development 15, 1083-1098.
- Malawi Government (2005): National Water Policy. Ministry of Irrigation and Water Development Lilongwe, Malawi.
- Malawi Government (2008): National Sanitation Policy. Ministry of Irrigation and Water Development, Lilongwe, Malawi.
- Malawi Government (2009a): Nkhata Bay District Assembly Socio-Economic Profile (2010-2012), Nkhata Bay District Assembly. Government Printing Press, Zomba, Malawi.
- Malawi Government (2009b): Nkhata Bay District Development Plan (2009/2012). Government Printing Press, Zomba, Malawi.
- Sugden, S. (2013): Catalyzing Sanitation as a Business. Interim Learning Report, Water for People, (https://dfy17fig4xpph.cloudfront.net/ assets/what-we-do/interim-learning-report-15e15a729a92806ee0a 6d1e2addf319b.pdf, assessed 5 July 2014)
- WHO/UNICEF (2013): Progress on sanitation and drinking-water 2013 update. World Health Organization and UNICEF, Geneva, Switzerland, 5 pp.
- United Nations (2008): Millennium Development GOAL 7: Ensure Environmental Sustainability. (http://www.un.org/millenniumgoals/ environ.shtml, assessed 7 April 2014).

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